MEMORANDUM

DATE: June 6, 1983

TO: Warner K. Reeser

FROM: Gary E. Parker GEP

cc: John Blueyes
Glen Lane
Ella Mulford

Confidential Claim Retracted
Authorized by: [signature]
Date: 6/25/13

SUBJECT: T.A. 38-675, Jackpile-Paguate Reclamation Plan: Preliminary Review of Reports Pertinent to Reclamation

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Two reports, Highwall Slope Stability in the North Paguate Area, and Evaluation of Hydrologic Effects Resulting from Pit Backfilling at the Jackpile-Paguate Uranium Mine, have been reviewed on a preliminary basis. As stated in a June 1, 1983, internal memorandum (copy attached) regarding a May 25, 1983, meeting between CERT and members of the Natural Resource Committee of the Pueblo of Laguna, both of these reports were prepared for Anaconda by consultants. It is my understanding that an independent hydrologic evaluation of the mine site is being prepared for the BLM, but will not be available prior to the meeting between the tribe and representatives of Anaconda scheduled for June 9, 1983. It is suggested that final discussions on mine hydrology and the proposed level of backfill be delayed until the independent study for BLM is completed. Additionally, more time is required to evaluate the modeling component of the hydrologic evaluation. As noted in the attached memo:

> The hydrologic effects report concludes that the groundwater recovery levels will be well below the previously projected levels except for the North Paguate pit where recovery levels are projected to be about 25 feet higher than previously projected. It is implied in the report that the backfill level, thus, can be reduced correspondingly. If further evaluation of the report determines that the lower groundwater recovery levels, except as noted for the North Pit, are reasonable, the tribe should be cautioned that the reclamation plan as written does not specify a numerical backfill elevation but, rather, relates the backfill elevation to three feet above the groundwater recovery level. The hydrologic effects report indicates less backfill would be needed to meet the final backfill elevation.

When backfill levels are agreed upon, it would be beneficial to establish control points and specify elevations in the reclaimed area.

Expertise within CERT to technically examine the stability report is limited and, thus, only general comments can be made. As stated in the memo:

The highwall stability report concluded that the North Paguate pit highwall is and would remain stable at the reported slope angles as high as 60° (the typical slope characteristics are reported to be 130 feet high at a 45° angle). Groundwater was not considered a factor since the water level would "be below the lowermost portion of the highwall. Therefore, no pressurization effects on highwall stability should occur." The highwall stability study was completed prior to the hydrology report prepared by Dames and Moore. Consequently, the estimated higher water recovery levels in the north pit area were not considered. However, the highwall stability likely would not be reduced because backfill would be above the water recovery level and, as noted above, the groundwater level would be below the lowermost portion of the highwall.

The highwalls appear stable based on the report findings. However, highwall stability is not the sole criterion for the tribe's desire for greater backfill of the pit areas. The tribe's desire for greater backfill is based upon (1) prior verbal commitments to the tribe, (2) aesthetics of the reclaim area, (3) premining conditions (i.e., absence of highwalls prior to mining), (4) suitability and access to the reclaimed area, and (5) the proximity of highwall areas to major access roads and, thus, concern about safety. It is suggested that some or all of these arguments be considered as the basis for eliminating pit highwalls.

GEP/dj

Attachment